

TECHNICAL DATASHEET

SUPERMICRO · EDGE & EMBEDDED

Supermicro Mini-1U IoT Server AS-1116R-FN4

H14 1U Ultra-short depth 249mm chassis with AMD EPYC 4005/4004 65W server

SKU AS-1116R-FN4

1U

AM5

Supermicro



FORM FACTOR

1U

MAX POWER (BASE)

306 W

HEAT OUTPUT

1,044 BTU/h

PRICE

On request

REQUEST A QUOTATION ONLINE

serverinvest.com/product/as-1116r-fn4

01 Product overview

The Supremicro AS-1116R-FN4 is a Mini-1U IoT Server built on AMD EPYC 4004/4005.

H14 1U Ultra-short depth 249mm chassis with AMD EPYC 4005/4004 65W server.

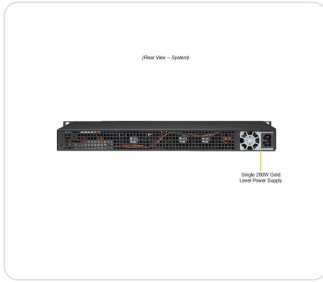
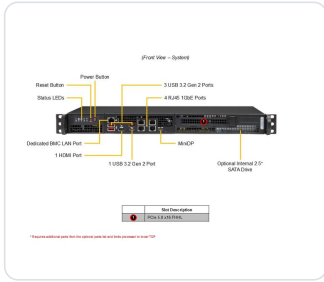
ServerInvest configures every AS -1116R-FN4 to order, updates BIOS and BMC firmware, installs your operating system on request and runs a 48-hour burn-in test before delivery. Every system includes a 3-year warranty.

HIGHLIGHTS

- AMD EPYC 4004/4005
- Total 2 bays 2 internal fixed 2.5" NVMe* drive bays
- Power: 1x 200W
- Networking: View AOC Options

KEY SPECIFICATIONS

Form factor	1U
Processor	AMD EPYC 4004/4005
Socket	AM5
Memory	2 DIMM slots
Drive bays	3 (3 NVMe)
Power supply	1x 200 W
Typical power draw	450 W
Networking	View AOC Options
Dimensions (W×H×D)	437 × 44 mm



02 Power & thermal

Calculated for the base configuration

IDLE	TYPICAL	MAXIMUM	HEAT (MAX)	COOLING	PSU LOAD
73 W	190 W	306 W	1,044 BTU/h	0.3 kW	153%



Typical 190 W · max 306 W · single PSU rating 200 W

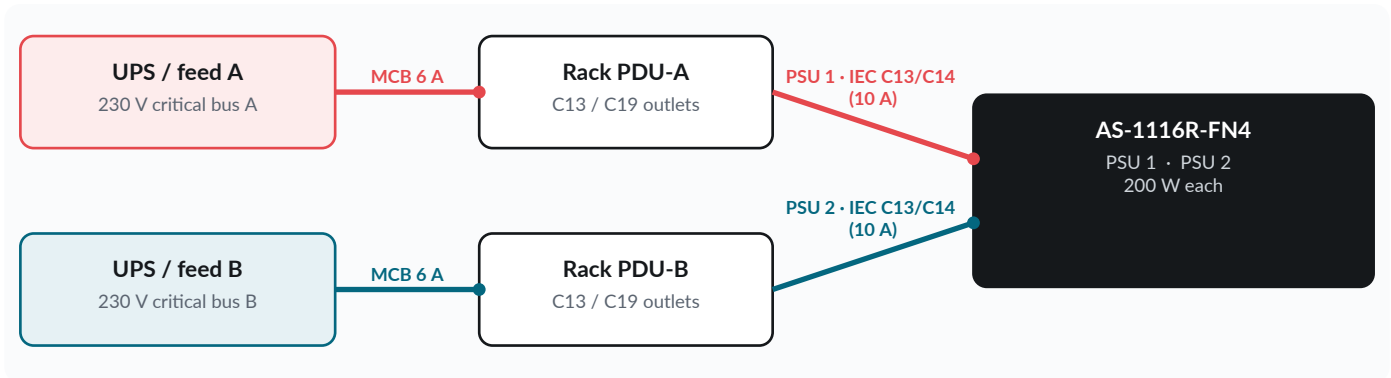
Annual IT energy (24/7)	1,357 kWh
Annual facility energy (PUE 1.5)	2,036 kWh
Annual energy cost	€271 IT · €407 incl. cooling (at 0.20 €/kWh)
CO ₂ emissions / year	0.53 t (grid factor 0.26 kg/kWh)
Power supplies	1x 200 W

POWER BY COMPONENT	IDLE	TYPICAL	MAX
Chassis, motherboard, fans, BMC	38 W	59 W	85 W
CPU (base configuration)	25 W	110 W	185 W
2x Memory (base configuration)	6 W	10 W	18 W

DC loads converted to wall power at 94% PSU efficiency; typical load assumed 70% of the time. Engineering estimates — confirm with the manufacturer's power calculator for critical designs.

03 Power connection diagram

Dual-feed (A/B) connection for redundant power supplies



- Connect PSU 1 to PDU-A and PSU 2 to PDU-B (independent feeds) using IEC C13/C14 (10 A) power cords.
- Maximum current per feed: 1.4 A at 230 V — each feed must be able to carry the full load if the other fails.
- Recommended protection per PDU circuit: MCB 6 A, curve C; RCD according to local regulations.
- Heat to remove at full load: 306 W = 1,044 BTU/h (0.3 kW).

04 Full specifications

MOTHERBOARD

Super H14SRV-HLN4F

PROCESSOR

CPU	Single Socket AM5 (LGA-1718) AMD EPYC 4005/4004 Series Processor
Core Count	16C/32T; 64MB Cache
Note	Supports up to 65W TDP CPUs (Air Cooled)

SYSTEM MEMORY

Memory	Slot Count: 2 DIMM slots Max Memory (1DPC): 192GB 5600MT/s ECC/non-ECC DDR5 UDIMM View Memory Options
Memory Voltage	1.1V

ON-BOARD DEVICES

Chipset	AMD B650
Network Connectivity	View AOC Options

INPUT / OUTPUT

LAN	4 RJ45 1 GbE LAN ports (Intel I350-AM4) 1 RJ45 1 GbE Dedicated BMC LAN port (ASPEED AST2600)
USB	1 USB 3.2 Gen2 Type-C port (Rear) 2 USB 3.2 Gen2 Type-A ports (Rear) 1 USB 3.0 Gen1 Type-A port (Rear)
Video	1 Mini-DP port (Rear) 1 port(s) supporting 8K@60Hz as specified in HDMI 2.1 (Rear)

TPM	1 TPM header 1 TPM Onboard/port 80
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SYSTEM BIOS

BIOS Type	AMI 32MB UEFI
BIOS Features	ACPI 6.5 SMBIOS 3.7 or later UEFI 2.9

MANAGEMENT

Software	SuperCloud Composer (SCC) Supermicro Server Manager (SSM) Super Diagnostics Offline (SDO) Supermicro Thin-Agent Service (TAS) SuperServer Automation Assistant (SAA) New! Plug-ins for 3rd Party Software
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SECURITY

Hardware	Trusted Platform Module (TPM) 2.0
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PC HEALTH MONITORING

Fan	Status monitor for speed control
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CERTIFICATIONS

Operating Systems	Grado: RHEL 9.6, RHEL 10.0, Windows Server 2022, Windows Server 2025 Raphael: RHEL 9.6, RHEL 10.0, Windows Server 2022, Windows Server 2025 View all OS Compatibility and Certification Matrix
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CHASSIS

Form Factor	Mini-1U
Model	CSE-505-203B

DIMENSIONS AND WEIGHT

Height	1.7" (43 mm)
Width	17.2" (437 mm)
Depth	9.8" (249 mm)
Package	6.1" (H) x 25.8" (W) x 18.3" (D)
Weight	Gross Weight: 10 lbs (4.54 kg)
Available Color	Black

FRONT PANEL

Buttons	Power On/Off button System Reset button
LED	Fan Fail/System Over Heat LED HDD activity LED Network Activity LEDs Power status LED

EXPANSION SLOTS

PCI-Express (PCIe) Configuration	Default 1 PCIe 5.0 x16 (in x16) LP slot View AOC Options
M.2	1 M.2 PCIe 5.0 x4 slot (M-key 2280) 1 M.2 PCIe 5.0 x4 slot (M-key 22110)

DRIVE BAYS / STORAGE

Drive Bays Configuration	Default: Total 2 bays 2 internal fixed 2.5" NVMe* drive bays Option A: Total 1 bay 1 internal fixed 3.5" SATA* drive bay (*NVMe/SATA support may require additional storage controller and/or cables, please see the optional parts list for details) View Drive Options
M.2	1 M.2 PCIe 5.0 x4 slot (M-Key 2280) 1 M.2 PCIe 5.0 x4 NVMe slot (M-key 22110) View M.2 Options

SYSTEM COOLING

Fans	3 counter-rotating 40x40x28mm Fan(s)
Air Shroud	1 Air Shroud

POWER SUPPLY

1x 200W
1x 200W Gold Level (91%) power supply
Dimension (WxHxL)
76 x 40.3 x 192 mm

OPERATING ENVIRONMENT

Environmental Spec.	Operating Temperature: 0°C to 40°C (32°F to 104°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
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ENVIRONMENTAL / RECYCLING

Recycle	Return Server-End of Life Product
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05 Built, tested & supported by ServerInvest

Engineered configuration

Every option validated for socket, memory channels, PCIe lanes, power and cooling.

48-hour burn-in

Assembled, firmware-updated and stress-tested before it leaves our workshop.

3-year warranty

Standard on every system, with on-site next-business-day upgrades available.

Rack-ready delivery

Rails, cable management and labelling included — delivered across Europe.



Interested in this solution?

Request a quotation online or talk to a solutions engineer — we reply within one business day.
office@serverinvest.com

Official manufacturer datasheet: serverinvest.com/product/as-1116r-fn4/datasheet/manufacture

